### PROJECT DESCRIPTION

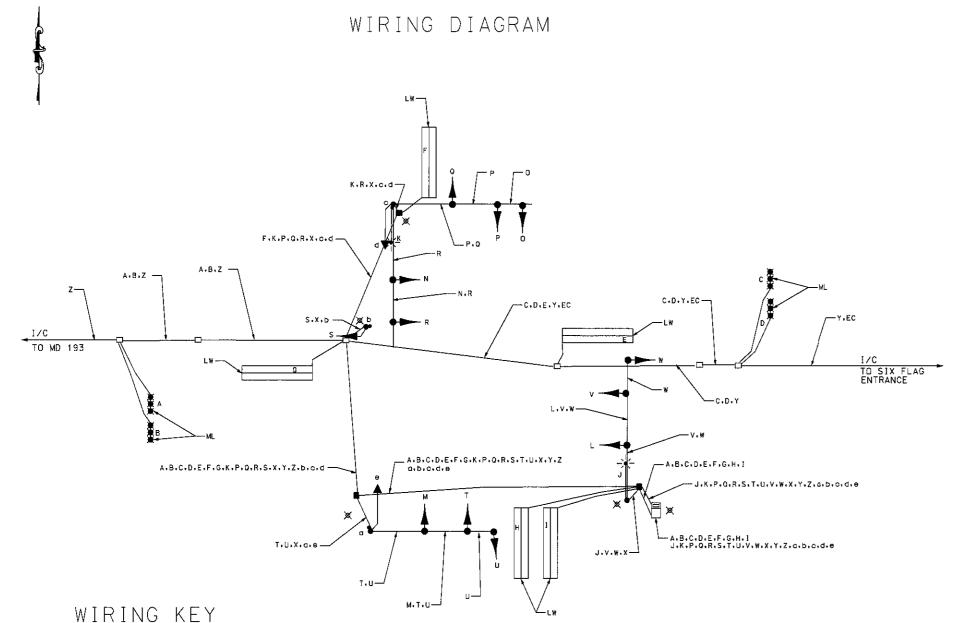
THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 214 AND CAMERON GROVE BOULEVARD IN PRINCE GEORGE'S COUNTY. MD 214 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

## INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX PHASE, FULL-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE-PERMISSIVE LEFT TURN PHASES FOR EASTBOUND AND WESTBOUND MD 214. AN ALTERNATE PEDESTRIAN PHASE WILL BE ADDED ACROSS THE WEST LEG OF MD 214.

### CONTROLLER REQUIREMENTS

A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH THREE, 4-CHANNEL TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS WILL BE INSTALLED IN A BASE MOUNTED CABINET.



#### A-D MICRO-LOOP PROBE

- E-I 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM
- SHIELDED J-K 2 CONDUCTOR ELECTRICAL CABLE
- (NO. 12 A.W.G.) L-O 5 CONDUCTOR ELECTRICAL CABLE
- (NO. 14 A.W.G.) P-W 7 CONDUCTOR ELECTRICAL CABLE
- (NO. 14 A.W.G.) X STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- Y 12-PAIR COMMUNICATION CABLE, JELLY FILLED UNDERGROUND
- EXISTING 12-PAIR COMMUNICATION CABLE, JELLY FILLED UNDERGROUND

- Z 1-CONDUCTOR ELECTRICAL CABLE (4 A.W.G.)-THHN/THWN a-c 2 CONDUCTOR ELECTRICAL CABLE
- (NO. 14 A.W.G.) d-e 3 CONDUCTOR ELECTRICAL CABLE

(NO. 14 A.W.G.)

- EC EXISTING CABLE
- LW LOOP WIRE (NO. 14 A.W.G.) ML MICRO-LOOP PROBE
- ▼ GROUND ROD

# (410) 787-7652

EQUIPMENT LIST "B" B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO OOTS FOR APPROVAL PRIOR TO INSTALLATION.

ITEM NO.	QUANTITY	DESCRIPTION
1001	LS	MAINTENANCE OF TRAFFIC
2002	6 EA	TEST PIT EXCAVATION
5004	260 LF	FURNISH AND INSTALL 12 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
5005	170 LF	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
6001	40 LF	FURNISH AND INSTALL DEPRESSED CURB AND GUTTER
6004	40 SF	FURNISH AND INSTALL 4 FT. CONCRETE SIDEWALK
8010	4 EA	FURNISH AND INSTALL 12 IN, PEDESTRIAN SIGNAL HEAD SECTION
8011	32 EA	FURNISH AND INSTALL 12 IN. VEHICULAR SIGNAL HEAD SECTION
8013	2 EA	FURNISH AND INSTALL 15 FT. BRACKET ARM FOR SIGNAL STRUCTURE
8014	2 EA	FURNISH AND INSTALL 250 WATT HPSV LUMINAIRE WITH PHOTOCELL
8019	12 EA	FURNISH AND INSTALL 8 IN. VEHICULAR SIGNAL HEAD SECTION
8020	1 EA	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT FOR SIGNAL

PHASE 4 ALT. & 8 R R R R R R R G G G G WK WK 9 R R R R R G G G G G FL/DW FL/DW 4 ALT. & 8 CHANGE R R R R R R R Y Y Y Y Y Y DW DW

### EQUIPMENT LIST "A"

A. APPROVED SHA EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

PHASE CHART

PHASE 1 & 5 | AG- | AG- | R | AG- | AG- | R | R | R | R | R | R | R | DW | DW

PHASE 1 & 6 G G R R R R R R R R R DW DW

PHASE 2 & 5 R R R G G G G R R R R R R DW DW

2 & 6 CHANGE Y Y Y Y Y Y R R R R R R DW DW PHASE 4 & 8 R R R R R R R G G G G G DW DW

4 & 8 CHANGE R R R R R R R Y Y Y Y Y DW DW

 $| R | R | R | \frac{y}{46-} | \frac{y}{46-} | G | R | R | R | R | R | R | DW | DW$ 

FL/Y | FL/Y | FL/Y | FL/Y | FL/Y | FL/R | FL/R | FL/R | FL/R | FL/R | FL/R | DARK | DARK |

PHASE 1 & 5 CHANGE MAY CHANGE TO PHASE 1 & 6, 2 & 5 OR 2 & 6

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

### CONTACT PERSONS FOR DISTRICT 3 ARE AS FOLLOWS:

MR. JOE GECKLE ASSISTANT DISTRICT ENGINEER - UTILITIES (301) 513-7350

MR. MAJID SHAKIB MR. RANDY BROWN ASSISTANT DISTRICT ENGINEER - TRAFFIC ASSISTANT DISTRICT ENGINEER - MAINTENANCE (301) 513-7358 (301) 513-7304

## CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF SR. MR. EUGENE BAILEY TEAM LEADER SIGN OPERATIONS CHIEF, TRAFFIC OPERATIONS (410) 787-7630 (410) 787-7676

MR. ROBERT SNYDER MS. DARLENE EIDE ASSISTANT DIVISION CHIEF. SUPPLY OFFICE IV (SIGNAL SHOP WAREHOUSE) TRAFFIC OPERATIONS (410) 787-7668

MR. ED RODENHIZER TEAM LEADER SIGNAL OPERATIONS

(410) 787-7631

EQUIPMENT LIST "B" CONTINUED

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO DOTS FOR APPROVAL PRIOR TO INSTALLATION.

l	APPRUVAL	PRIUR	IU INS	OTALLATIUN.
l	ITEM NO.	QUAN	NTITY	DESCRIPTION
_			ΕA	FURNISH AND INSTALL MICRO PROPE SET 1000 FT
	8028	4	LA	FURNISH AND INSTALL MICRO PROBE SET 1000 FT.
			_	LEAD-IN
i i	8030		EΑ	FURNISH AND INSTALL PEDESTAL POLE ANY SIZE
	8032		EΑ	FURNISH AND INSTALL PEDESTRIAN PUSHBUTTON AND SIGN
	8035	1	EΑ	FURNISH AND INSTALL MAST ARM POLE AND TWIN 50 FT./70 FT.
				MAST ARMS
	8051	50	LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID
				ELECTRICAL PVC CONDUIT - TRENCHED
	8052	250	LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID
				ELECTRICAL PVC CONDUIT - BORED
	8053	20	LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID
				ELECTRICAL PVC CONDUIT - TRENCHED
	8057	18	CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
	8059	236		FURNISH AND INSTALL WOOD SIGN SUPPORTS 4" X 6"
	8060	920		
	8062	60		FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WI
				FURNISH AND INSTALL 1 IN. GALVANIZED DETECTOR WIRE SLEEVE
	8068	25	L F	FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXIBLE
				NON-METALLIC CONDUIT FOR DETECTOR WIRE SLEEVE
	8071	50	LF	FURNISH AND INSTALL ELECTRICAL CABLE 1-CONDUCTOR
				NO. 4 A.W.GTHHN/THWN
	8072	3	EΑ	FURNISH AND INSTALL ELECTRICAL HANDHOLE
	8076	1960	LF	FURNISH AND INSTALL 12-PAIR COMMUNICATION CABLE,
				JELLY-FILLED (UNDERGROUND)
	8080	5	FΔ	FURNISH AND INSTALL GROUND ROD 3/4 IN. DIAMETER
]	0000	J		BY 10 FT. LENGTH
	0.004	860	1 -	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR
	8081	000	LF	
	8082	670		(ALUMINUM SHIELDED) FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR
	0002	670	LF	(NO. 14 A.W.G.)
	0007	47.0		
	8083	470	LF	FURNISH AND INSTALL ELECTRICAL CABLE 3-CONDUCTOR
	0.004	100		(NO. 14 A.W.G.)
	8084	100	LF	FURNISH AND INSTALL ELECTRICAL CABLE 5-CONDUCTOR
		0700	. –	(NO. 14 A.W.G.)
	8085	2300	LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR
				(ND. 14 A.W.G.)
	8086	420	LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR
				(NO. 12 A.W.G.)
	8087	2280	LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE
				TUBING (NO. 14 A.W.G.)
	8088	680	LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL
	- -			LOOP DETECTOR
	8093	1	EΑ	FURNISH AND INSTALL CONTROLLER AND CABINET
	0030		V 7 .	BASE MOUNT (SIZE 6)
		3	EΑ	FURNISH AND INSTALL LOOP DETECTOR AMPLIFIER
			EA	FURNISH AND INSTALL W3-3 SIGN (48" X 48") WITH "NEW"
		7	LA	PANEL SIGN (30" X 30") AND FLAGS
		^	_ A	
		2	EΑ	FURNISH AND INSTALL W3-3 SIGN (36" X 36") WITH "NEW"
		0	_ ^	PANEL SIGN (30" X 30") AND FLAGS
	<del></del>	2	EΑ	FURNISH AND INSTALL R10-12 SIGN (36" X 42")
				MAST ARM MOUNT
1		2	EΑ	FURNISH AND INSTALL D3-2 DUAL FACED SIGN
				"CAMERON GROVE BLVD.", (VAR. X 16")
				MAST ARM MOUNT
1		2	ΕA	FURNISH AND INSTALL M95-1 SIGN (72" X 24")
1				MAST ARM MOUNT
1		28	O LF	REMOVE AND RE-INSTALL EXISTING INTERCONNECT CABLE
1				
I				

## EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO. NONE

QUANTITY DESCRIPTION

ALL OTHERS SHALL BECOME THE PROPERTY OF THE CONTRACTOR

TRAFFIC CONCEPTS, INC.

325 Gambrills Road Suite E Gambrills, MD 21054 (410) 923-7101

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION GENERAL INFORMATION

MD 214 AT CAMERON GROVE BOULEVARD

SHEET NO.

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BW996M82 DRAWN BY: M.HOWELL F.A.P. NO. CHECKED BY: T.ZAYDEL S.H.A. NO. SCALE:

4205 PRINCE GEORGE'S NONE COUNTY: T.I.M.S. NO. LOG MILE: 16021407.90 6-7-02 E032 DATE: